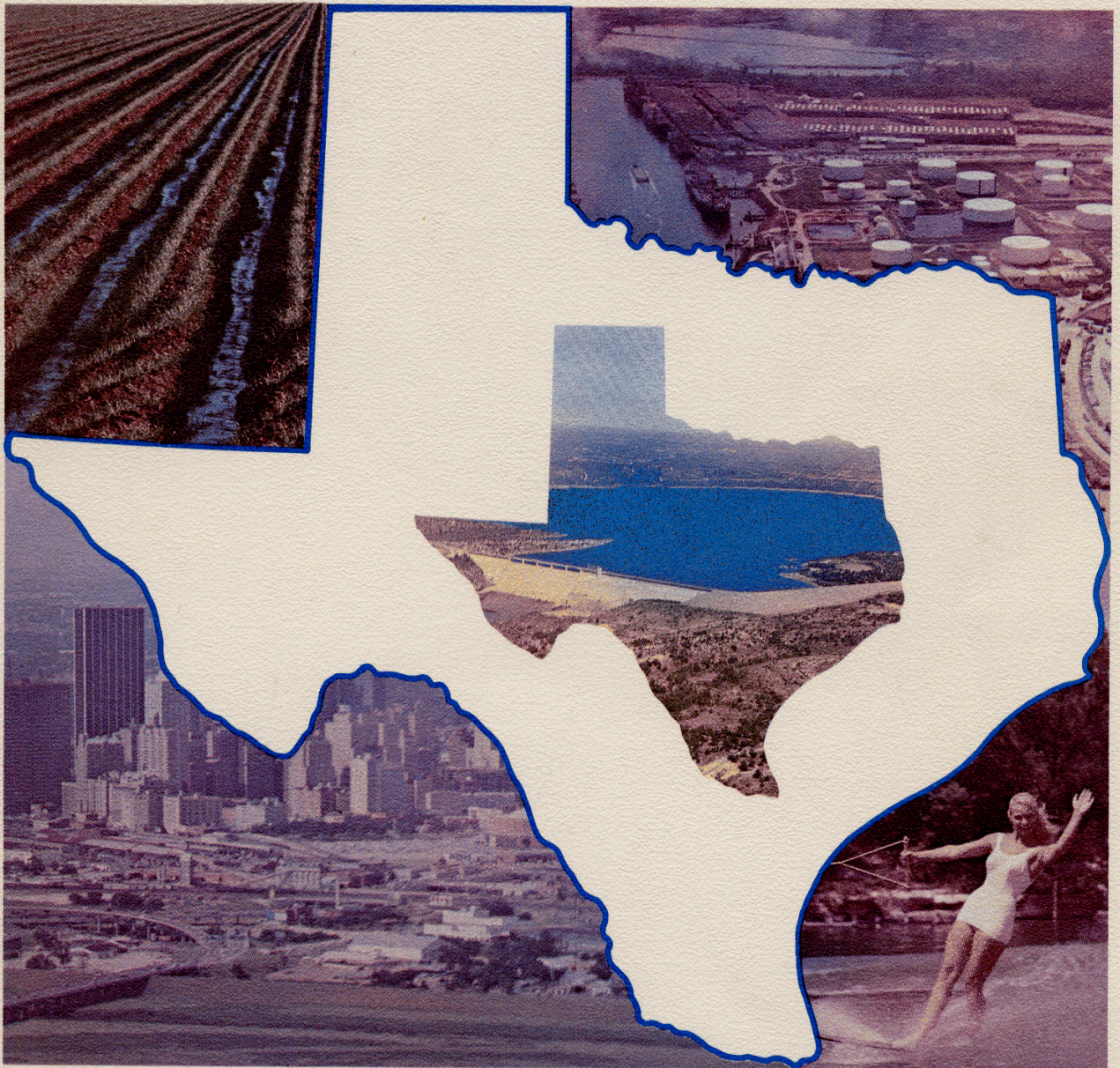


THE TEXAS WATER PLAN

Summary



TEXAS WATER
DEVELOPMENT BOARD
NOVEMBER 1968

THE
TEXAS WATER PLAN
SUMMARY

THE TEXAS WATER DEVELOPMENT BOARD

November 1968

TEXAS WATER DEVELOPMENT BOARD



P. O. BOX 12386
CAPITOL STATION
AUSTIN, TEXAS 78711

The People of Texas

The Honorable John Connally
Governor of Texas

The Honorable Preston Smith
Lieutenant Governor of Texas

The Honorable Ben Barnes
Speaker of the House

The Legislature of the State of Texas

Transmitted herewith is a summary of the Texas Water Plan, a flexible guide for the orderly development, conservation, and wise management of the State's water resources to meet the needs of our expanding State to the year 2020. Since Texas does not have enough water within its boundaries to meet all its needs beyond 1985 it will be necessary to seek supplementary water from outside its borders. The Plan includes the possibility of importation of large quantities of surplus water from the lower reaches of the Mississippi River to areas of greatest need in Texas, in order to meet our requirements after 1985.

The Texas Water Plan recognizes the importance of the roles of local, State, and Federal agencies in the development of our water resources, and the need for the continuation of the cooperation and harmony that has been manifest in the preparation of the Plan.

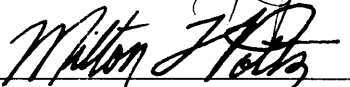
Water is vital to sustaining the people of Texas and their economy. Full development and conservation of all our water resources is essential if Texans are to meet their responsibilities for a rapidly expanding population and for supplying the accompanying demands for water for domestic and municipal uses, industry, agriculture, mining, hydroelectric power, navigation, and recreation. If we are to meet these responsibilities and provide the water so essential to our well-being, we must begin now. To delay the full development of our water resources will place a burden upon the future of Texas from which it might never recover.

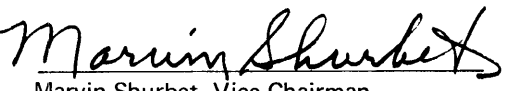
Respectfully submitted,

Texas Water Development Board


Mills Cox, Chairman



W. E. Tinsley, Member


Milton Potts, Member


Marvin Shurbet, Vice Chairman


Robert B. Gilmore, Member


Groner Pitts, Member


Howard B. Boswell, Executive Director

FOREWORD

NEED FOR ACTION

The preparation and release of the Texas Water Plan is only the beginning insofar as the effective protection, conservation, development, distribution, and utilization of Texas' water resources is concerned. The Texas Water Plan precipitates a moment of critical decision for the Legislature, for the people of Texas, and for the future of Texas. Similarly, immediate major decisions will be required of the Federal Government.

Action by and within the State of Texas alone, even on a large scale, is not enough, because the water resources now available to Texas are not sufficient to meet the economically justified future water needs of the entire State no matter how efficiently they may be conserved, distributed, and administered. Thus, the only solution for this shortage of water supply is the import of water into Texas from out-of-State sources, possible only through the coordinated efforts of Federal agencies, governmental agencies of other States, the State of Texas, and local Texas agencies. The urgent need for additional water will impose a time schedule which will be extremely difficult to meet even with the fullest effort. Delay by the State, or by any other concerned level of government, would have irreversible results.

Present water developments and those of the future will be extremely costly. Therefore, the maximum degree of efficiency in planning, financing, design, construction, and management is imperative. The State has a major responsibility for achieving this objective. By prompt effective action, whatever immediate costs may be involved will be returned many times to the State as a whole.

With the heavy demands on the Federal budget, it is completely unrealistic to expect that the United States would fully finance construction of all of the works needed to meet Texas' urgent water needs. The State of Texas, and its political subdivisions, must provide significant portions of the funds required. Further, in order that Texas may have full control over the development and utilization of its water resources, it is essential that the State be a major participant in financing and directing the Texas Water Plan into actuality and in its management once construction is completed.

The magnitude of the job and the tremendous long-range commitment of State resources involved must not be underestimated, nor the tragic consequence of delay. There is not a water resource plan of this magnitude or complexity in existence in the world today or even in the planning stage, yet Texas' water needs for the future can be met with nothing less sweeping.

STATUTORY AUTHORIZATION

Planning for long-range water resource development for Texas has been conducted by the Board in compliance with a series of statutory enactments. These Legislative and Executive directives have reflected the response by the State to the increasing complexity of its water problems.

Acting under the stimulus of prolonged drought, broken by heavy rains and flooding in the Spring of 1957, the Legislature in special session adopted the Water Planning Act of 1957. Complying with provisions of that Act, the Board prepared and submitted to the 56th Legislature a progress report titled "Texas Water Resources Planning at the End of the Year 1958."

In May 1960, Governor Price Daniel requested that the Board assume State leadership in coordinating water planning in Texas, and that it prepare a Statewide plan to meet municipal and industrial water requirements. Cooperating with river authorities and cities, the Board prepared a report titled "A Plan for Meeting the 1980 Water Requirements of Texas," May 1961.

The United States Study Commission—Texas was authorized by Congressional Act on August 28, 1958. Its assignment was to formulate a basic, comprehensive, and integrated plan for development of the land and water resources for a defined area of study, which included only about 62% of Texas.

The Bureau of Reclamation and Corps of Engineers subsequently completed several reports on specific projects. The Corps of Engineers reports included multiple-purpose reservoir projects, local flood control, navigation primarily along the Texas Gulf Coast, hurricane protection, and comprehensive reports on the Sabine and Trinity River Basins. The Bureau distributed its Preliminary Report on the Texas Basins Project in 1963.

Local entities—cities, river authorities, and water districts—were also suggesting projects in their areas, some of which conflicted with proposals of Federal agencies.

Governor John Connally recognized the need for a more orderly and longer range analysis of the State's water problems, water needs, and solutions to these

problems on a Statewide basis, and by letter dated August 12, 1964, requested that a comprehensive State Water Plan be prepared. He said:

"I am increasingly concerned about drought conditions in Texas and progress of our efforts to develop adequate sources of water for all our State. I'm sure the members of the Texas Water Commission share this concern with all our citizens.

The Bureau of Reclamation and the Corps of Engineers have proposed broad water development projects for Texas far beyond the plans of the Texas Water Commission report, "A Plan for Meeting the 1980 Water Requirements of Texas." In my opinion, these plans fall short of satisfying the water needs for all of Texas.

Furthermore, the Congress is presently considering a Federal water pollution control bill which will supplant state authority in this field. I have long been concerned that the State exercise its responsibility in all areas of water conservation and development. The recently enacted Water Resources Act of 1964 does provide an opportunity for state participation in federal water research programs.

As you know, it is my responsibility, with the help of the Texas Water Commission, to review major federal projects and formally approve or disapprove them on behalf of the State. I cannot properly evaluate some proposed federal projects without a longer-range State Water Plan for Texas.

Therefore, by authority granted me under Article V, Section 22, House Bill 86, 58th Texas Legislature (The General Appropriations Act), I hereby

request the Texas Water Commission to use any available moneys appropriated under the Act to begin at once to develop a comprehensive State Water Plan. In the public interest and to aid the economic growth and general welfare of the State, I urge that you explore all reasonable alternatives for development and distribution of all our water resources to benefit the entire State, including proposals contained in preliminary reports of the federal agencies."

The State's planning programs have been conducted in accordance with the Texas Water Planning Act of 1957 (V.A.C.S. 7472d-1) through August 1965, and in accordance with V.A.C.S. 8280.9(b) as amended by acts of the 59th Legislature since September 1, 1965.

Acceleration of the planning effort, and the development of a longer range Texas Water Plan, was

begun with Governor Connally's authorization of August 12, 1964, under authority given the Governor in Acts 1963, 58th Legislature, Chapter 525, p. 1393, Article 5, Section 22.

Emergency funds were allocated for key planning staff for the accelerated program in October 1964 from appropriations to the Governor for the purpose of deficiency grants.

The 59th Legislature provided additional funds for the accelerated program in a special emergency appropriation in Acts 1965, Chapter 4, p. 7. In addition, the 59th Legislature realigned the functions of the several Texas water agencies. This realignment assigned planning for water development in Texas, including financing, as a responsibility of the Texas Water Development Board.

The 60th Legislature provided continuing support for the planning program in its regular appropriations to the Board.

ACKNOWLEDGEMENTS

Many individuals and organizations, both public and private, have participated in the formulation of the Texas Water Plan. It would be impossible to acknowledge the individual contribution of every person and every group playing a part in bringing Texas to the position of strength in managing its water resources that this Plan makes possible. With sincere appreciation, however, the Board recognizes this tremendous reservoir of support. The special and dedicated assistance of the following merit special mention:

*The Governor of Texas
The Honorable John Connally*

*The Lieutenant-Governor of Texas
The Honorable Preston Smith*

*The Speaker of the House of Representatives
The Honorable Ben Barnes*

The Legislature of the State of Texas

whose untiring support has made possible this Plan for sound water development in Texas.

The staff of the Board, both past and present, who have unstintingly worked toward the completion of the Texas Water Plan.

Members of the then Texas Water Commission, who provided initial direction for the planning program.

*Joe D. Carter, Chairman
Otha F. Dent
H. A. Beckwith
William E. Berger*

Consulting Advisory Panel, which performed an incalculable service to the Board and the State by setting the planning program on a firmly marked road of achievement.

*Joe M. Kilgore, Chairman
Harvey O. Banks
William F. Guyton
Allen V. Kneese
Mason Lockwood*

The U.S. Army Corps of Engineers and the Bureau of Reclamation for their very able and invaluable assistance in the Texas Water Plan, and to the U.S. Geological Survey for the very valuable studies it is making of ground waters.

Universities and colleges that have prepared reports and conducted studies vital to the development of the Plan.

*University of Texas at Austin
Texas A&M University
Texas Technological College
University of Texas at El Paso*

Leeds, Hill and Jewett, Inc., General Consultant to the Board, through guidance, assistance, direct participation, preparation of reports, and staff training, have played an essential part in every phase of the planning program.

*Harvey O. Banks, President
Raymond A. Hill*

Consultants and consulting firms who have prepared reports used by the Board in the many facets of formulating the Plan.

A. C. Bowden

Brown & Root, Inc.

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Harza Engineering Company

McDonnell Automation Company

Hydrocomp International

International Business Machines Corporation

Lockwood, Andrews, & Newnam, Inc.

National Engineering Company

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Reagan & McCaughan

Southwest Research Institute

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All of the many State and Federal agencies who have cooperated and assisted in countless ways in making possible development of the Plan.

River authorities, water districts, and other political entities that have supplied invaluable advice and assistance on the water needs and problems in the areas they represent.

The Texas Water Conservation Association and private organizations that have provided unfailing and generous encouragement and support.

All of those individuals and organizations who, through testimony at hearings held by the Board in 1966, contributed to the development of the Plan.

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